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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,994	08/02/2001	Rui Xie	D-6400 CIP	8016

7590
Crompton Corporation
Benson Road
Middlebury, CT 06749

07/09/2008

EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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07/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary	Application No.		Applicant(s)	
	09/919,994		XIE ET AL.	
	Examiner		Art Unit	
	Rabon Sergeant		1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 20, 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/12/2008</u> | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 34-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al. ('193).

Patentees disclose the removal of isocyanate monomers from isocyanate prepolymers, wherein solvents, which have boiling point properties that meet those of applicants' solvents, are added to the prepolymer reaction components at the start of or during prepolymer synthesis. The resulting solvent containing prepolymers are then subjected to distillation to obtain products having levels of isocyanate monomers that meet the instantly claimed levels. Furthermore, the

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reference discloses that MDI is a suitable diisocyanate for the process. See abstract and columns 2-6, especially column 6, lines 13+. The position is taken that the disclosure at column 6, lines 13+ is sufficient to anticipate applicants' initial isocyanate dissolving process step.

3. Applicants' arguments and amendment have been considered; however, they are insufficient to overcome the prior art rejection. Applicants' amendment essentially parallels those that have been set forth before, and the examiner maintains for the reasons previously set forth that it is not seen that the argued higher boiling point solvent has been definitively excluded by the claim amendment. The position is taken that applicants' "comprising" language causes the claims to be open to the inclusion of additional components and processing steps, including the use of the argued additional solvent of the prior art. It is by no means clear that the argued "consisting of" language is adequate to exclude the argued solvents from the full scope of the claim. The prior art makes clear that the solvents may be added at the start of prepolymer synthesis or any time during reaction prior to distillation (see column 6, lines 13-15, 42, and 43). Accordingly, the position is taken that the claims are open to the addition of the argued solvent with the polyol component prior to reaction or as an individual component at any point during reaction prior to distillation, such as within applicants' claimed step (B), and that such permutations are encompassed by the prior art. Applicants have stated that it has been held that using "consisting of" in a clause limits only the elements of that clause; and applicants have further argued that interpreting "comprising" from a preamble as including additional steps to a clause limited by "consisting of" is improper. In response, the examiner's interpretation of the claim is entirely consistent with these argued holdings. The examiner has set forth no position stating that the specific phrase governed by "consisting of" is open to the inclusion of other

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solvents; the examiner has simply stated that other aspects of the claim are open to the inclusion of other solvents.

4. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al. ('193) in view of Rizk et al. ('996) or Lander ('473).

As aforementioned within paragraphs 2 and 3, Rosenberg et al. disclose the removal of isocyanate monomers from isocyanate prepolymers, wherein solvents, which have boiling point properties that meet those of applicants' solvents, are added to the prepolymer reaction components at the start of or during prepolymer synthesis. The resulting solvent containing prepolymers are then subjected to distillation to obtain products having levels of isocyanate monomers that meet the instantly claimed levels. Furthermore, the reference discloses that MDI is a suitable diisocyanate for the process.

5. Rosenberg et al. are silent regarding the addition of blocking agents to the prepolymers to yield blocked isocyanate group containing prepolymers; however, the blocking of diphenylmethane diisocyanate derived prepolymers with conventional blocking agents, such as those claimed, to yield storage stable prepolymers was known at the time of invention. This position is supported by the disclosures and examples of Rizk et al. and Lander. Therefore, since the blocking of MDI prepolymers to obtain storage stable reactants and/or one-component coating or sealing compositions was a conventional practice at the time of invention, the position is taken that it would have been obvious to block the prepolymers of the primary reference for the same reasons.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

R. Sergent
July 6, 2008